	Application No.	Applicant(s)
Notice of Allowability	10/700,798	DATTA ET AL.
	Examiner	**Art Unit**	
	RAMY M. OSMAN	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 5/18/09*.

2. ☒ The allowed claim(s) is/are *24-32,34-42 and 44*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *8/26/09* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/Ramy M Osman/
Primary Examiner, Art Unit 2457

DETAILED ACTION

Status of Claims

1.   This action is responsive to Amendment filed on May 18, 2009 where Applicant canceled

claim 53. Claims 24-44 remain pending.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Paul Levy (reg 45748) on 8/26/09.

        The application has been amended as follows:

SEE ATTACHED LISTING OF CLAIMS

Allowable Subject Matter

3.   Claims 24-32,34-42,44 are allowed.

4.   The following is an examiner's statement of reasons for allowance: Applicants invention

of use of joining a peer to peer network, is found to be patentable. Prior art references found to

be pertinent to Applicants disclosure, either only teach minor aspects of the invention or only

teach the general environment of the invention. The collective prior art, either singly or in

combination, do not teach the claim limitations.

The primary reason for allowance is the selecting a member peer system from which a negative join response has been received as a force connection peer system; sending a force connection request to said force connection peer system, wherein said force connection request requests that said force connection peer system close one of the open connections of said force connection peer system, wherein selecting said force connection peer system includes applying said set of one or more connection rules to the member peer systems that sent negative join responses.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMY M. OSMAN whose telephone number is (571)272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ramy M Osman/   August 26, 2009
Primary Examiner, Art Unit 2457

LISTING OF CLAIMS

1-23, 33, 43, 45-53. (Canceled)

24.   (Currently Amended)   A method of adding a peer system to a peer-to-peer

relay network, comprising:

opening a connection between a server and a joining peer system;

providing grid information to said joining peer system indicating one or more established

peer-to-peer relay networks;

receiving a grid selection from said joining peer system indicating a selected peer-to-peer

relay network, wherein said selected peer-to-peer relay network has one or more member peer

systems;

providing network addresses of each of said one or more member peer systems to said

joining peer system; and

receiving a connection update from said joining peer system indicating to which member

peer systems said joining peer system is connected;

wherein each member peer system is connected to a number of other member peer

systems that is less than or equal to a connection limit and each member peer system stores a set

of one or more relay rules for relaying data to the other member peer systems connected to that

member peer system, and

wherein the joining peer system sends a join request to the one or more member peer

systems and receives either a positive or a negative response from the member peer system.

selecting a member peer system from which a negative join response has been received as a force connection peer system;

sending a force connection request to said force connection peer system, wherein said force connection request requests that said force connection peer system close one of the open connections of said force connection peer system,

wherein selecting said force connection peer system includes applying said set of one or more connection rules to the member peer systems that sent negative join responses.

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25.   (Previously Presented)   The method of claim 24, further comprising:

opening a connection between said server and an establishing peer system, wherein the establishing peer system is one of said member peer systems;

receiving a request to create said peer-to-peer relay network from said establishing peer system;

registering said peer-to-peer relay network in storage; and

sending a creation confirmation to said establishing peer system.

26.   (Currently Amended)   A method of joining a peer-to-peer relay network, comprising:

sending a join message from a joining peer system to each of one or more member peer systems in a peer-to-peer relay network;

receiving a join response from at least one of said one or more member peer systems, wherein each join response is positive or negative, and a positive join response indicates the

sending member peer system has an available connection and a negative join response indicates

the sending member peer system does not have an available connection;

opening a connection with each selected member peer system;

selecting one or more member peer systems up to a connection limit according to a set of

one or more connection rules;

opening a connection with each selected member peer system;

wherein each member peer system is connected to a number of other member peer

systems that is less than or equal to said connection limit and each member peer system stores a

set of one or more relay rules for relaying data to the other member peer systems connected to

that member peer system, and

wherein selecting one or more member peer systems includes:

selecting a member peer system from which a negative join response has been received as

a force connection peer system;

sending a force connection request to said force connection peer system, wherein said

force connection request requests that said force connection peer system close one of the open

connections of said force connection peer system,

wherein selecting said force connection peer system includes applying said set of one or

more connection rules to the member peer systems that sent negative join responses.

27. (Original)   The method of claim 26, wherein:

a member peer system has an available connection if the member peer system has a

number of open connections to other member peer systems that is less than said connection limit.

28. (Original)   The method of claim 26, wherein:

selecting one or more member peer systems includes storing a response time for each

received join response.

29. (Original)   The method of claim 26, wherein:

selecting one or more member peer systems includes:

selecting the member peer system from which the positive join response that is received

first by said joining peer system, and selecting the member peer system from which the positive

join response that is received last by said joining peer system within a time limit.

30. (Original)   The method of claim 29, wherein:

selecting one or more member peer systems includes substantially randomly selecting

additional member peer systems up to said connection limit from among the remaining

unselected member peer systems from which positive joint response have been received.

31. (Original)   The method of claim 29, wherein:

selecting one or more member peer systems includes selecting additional member peer

systems up to said connection limit from among the remaining unselected member peer systems

from which positive joint response have been received in the order in which the positive joint

responses were received.

32. (Currently Amended)   The method of claim 26, comprising

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selecting one or more member peer systems includes:¶
selecting a member peer system from which a negative join response has been received as a force connection peer system;¶
sending a force connection request to said force connection peer system, wherein said force connection request requests that said force connection peer system close one of the open connections of said force connection peer system; and

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receiving a force connection confirmation from said force connection peer system.

34.   (Previously Presented)   The method of claim 26, further comprising:

opening a connection between a server and said joining peer system;

receiving grid information at said joining peer system indicating one or more established

peer-to-peer relay networks;

sending a grid selection from said joining peer system to said server indicating a selected

peer-to-peer relay network, wherein said selected peer-to-peer relay network has one or more

member peer systems;

receiving network addresses of each of said one or more member peer systems at said

joining peer system; and

sending a connection update from said joining peer system indicating to which member

peer systems said joining peer system is connected.

35.   (Currently Amended)   A method of establishing a peer-to-peer relay

network, comprising:

opening a connection between a server and an establishing peer system, wherein the

establishing peer system is one of said member peer systems;

sending a request to create said peer-to-peer relay network from said establishing peer

system to said server;

receiving a creation confirmation at said establishing peer system from said server;

wherein said establishing peer system stores a connection limit defining a number of

other peer systems up to which said establishing peer system is permitted to connect, and said

establishing peer system stores a set of one or more relay rules for relaying data to other peer

systems connected to said establishing peer system, and

wherein the joining peer system sends a join request to the one or more member peer

systems and receives either a positive or a negative response from the member peer system,

selecting a member peer system from which a negative join response has been received as

a force connection peer system;

sending a force connection request to said force connection peer system, wherein said

force connection request requests that said force connection peer system close one of the open

connections of said force connection peer system,

wherein selecting said force connection peer system includes applying said set of one or

more connection rules to the member peer systems that sent negative join responses..

36.   (Currently Amended)   A method of connecting peer systems in a peer-to-

peer relay network, comprising:

sending a connection available message from a disconnected peer system to one or more

member peer systems in a peer-to-peer relay network when said disconnected peer system has a

number of open connections to member systems that is less than a connection limit;

receiving a connection available response from at least one of said one or more member

peer systems, wherein each connection available response is positive or negative, and a positive

join response indicates the sending member peer system has an available connection and a

negative join response indicates the sending member peer system does not have an available connection;

selecting a member peer system according to a set of one or more connection rules;

opening a connection with said selected member peer system;

wherein each member peer system is connected to a number of other member peer systems that is less than or equal to said connection limit and each member peer system stores a set of one or more relay rules for relaying data to the other member peer systems connected to that member peer system, and

wherein selecting one or more member peer systems includes:

selecting a member peer system from which a negative join response has been received as a force connection peer system;

sending a force connection request to said force connection peer system, wherein said force connection request requests that said force connection peer system close one of the open connections of said force connection peer system,

wherein selecting said force connection peer system includes applying said set of one or more connection rules to the member peer systems that sent negative join responses.

37. (Original)   The method of claim 36, further comprising:

closing a connection by said disconnected peer system.

38. (Original)   The method of claim 36, wherein:

a member peer system has an available connection if the member peer system has a

number of open connections to other member peer systems that is less than said connection limit.

39. (Original)   The method of claim 36, wherein:

selecting a member peer system includes storing a response time for each received

connection available response.

40. (Original)   The method of claim 36, wherein:

selecting a member peer systems includes selecting the member peer system from which

the positive connection available response that is received first by said disconnected peer system.

41. (Original)   The method of claim 36, wherein:

selecting a member peer systems includes not selecting a member peer system from

which said disconnected peer system has disconnected within a disconnection time period.

42.. (Currently Amended)   The method of claim 36, comprising

receiving a force connection confirmation from said force connection peer system.

44. (Original)   The method of claim 36, further comprising:

sending an update to a server indicating a connection has been opened between said

disconnected peer system and said selected member peer system.

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selecting a member peer systems includes:¶
selecting a member peer system from which a negative connection available response has been received as a force connection peer system;¶
sending a force connection request to said force connection peer system, wherein said force connection request requests that said force connection peer system close one of the open connections of said force connection peer system; and

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